



SEQUENCE LISTING

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<110> Jin, Hong  
Tang, Roderick  
Li, Shengqiang  
Bryant, Martin

<120> Recombinant RSV Expression Systems and Vaccines

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<140> 09/724,379

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Ser Tyr Ile Phe Asn Gly Pro Tyr Leu Lys Asn Asp Tyr Thr Asn Leu  
35 40 45  
Ile Ser Arg Gln Asn Pro Leu Ile Glu His Met Asn Leu Lys Lys Leu  
50 55 60  
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65 70 75 80  
Leu Glu Glu Pro Thr Tyr Phe Gln Ser Leu Leu Met Thr Tyr Lys Ser  
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115 120 125  
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130 135 140  
Gln Asp Glu Asp Asn Ser Val Ile Thr Thr Ile Ile Lys Asp Asp Ile  
145 150 155 160  
Leu Ser Ala Val Lys Asp Asn Gln Ser His Leu Lys Ala Asp Lys Asn  
165 170 175  
His Ser Thr Lys Gln Lys Asp Thr Ile Lys Thr Thr Leu Leu Lys Lys  
180 185 190  
Leu Met Cys Ser Met Gln His Pro Pro Ser Trp Leu Ile His Trp Phe  
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Asn Leu Tyr Thr Lys Leu Asn Asn Ile Leu Thr Gln Tyr Arg Ser Asn  
210 215 220  
Glu Val Lys Asn His Gly Phe Thr Leu Ile Asp Asn Gln Thr Leu Ser  
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Gly Phe Gln Phe Ile Leu Asn Gln Tyr Gly Cys Ile Val Tyr His Lys  
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275 280 285  
Ser Asn Cys Leu Asn Thr Leu Asn Lys Ser Leu Gly Leu Arg Cys Gly  
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Phe Asn Asn Val Ile Leu Thr Gln Leu Phe Leu Tyr Gly Asp Cys Ile

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Arg	Lys	Arg	Phe	Tyr	Asn	Ser	Met	Leu	Asn	Asn	Ile	Thr	Asp	Ala
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Asp	Lys	Thr	Val	Ser	Asp	Asn	Ile	Ile	Asn	Gly	Arg	Trp	Ile	Ile
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Asn	Asn	Leu	Ser	Glu	Leu	Tyr	Phe	Leu	Phe	Arg	Ile	Phe	Gly	His
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Glu	Thr	Lys	Phe	Tyr	Leu	Leu	Ser	Ser	Leu	Ser	Met	Leu	Arg	Gly
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Pro	Thr	Leu	Arg	Asn	Ala	Ile	Val	Leu	Pro	Leu	Arg	Trp	Leu	Thr
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Tyr	Lys	Leu	Asn	Thr	Tyr	Pro	Ser	Leu	Leu	Glu	Leu	Thr	Glu	Arg
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Leu	Ile	Val	Leu	Ser	Gly	Leu	Arg	Phe	Tyr	Arg	Glu	Phe	Arg	Leu
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Val	Gly	Arg	Met	Phe	Ala	Met	Gln	Pro	Gly	Met	Phe	Arg	Gln	Val
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Glu	Ser	Leu	Thr	Arg	Tyr	Gly	Asp	Leu	Glu	Leu	Gln	Lys	Ile	Leu
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Leu	Lys	Ala	Gly	Ile	Ser	Asn	Lys	Ser	Asn	Arg	Tyr	Asn	Asp	Asn
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Asp	Glu	Leu	His	Gly	Val	Gln	Ser	Leu	Phe	Ser	Trp	Leu	His	Leu
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Trp	Thr	Ile	Glu	Ala	Ile	Ser	Leu	Leu	Asp	Leu	Ile	Ser	Leu	Lys
785					790					795				Gly
Lys	Phe	Ser	Ile	Thr	Ala	Leu	Ile	Asn	Gly	Asp	Asn	Gln	Ser	Ile
														Asp

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Pro	Ala	Ser	Ile	Lys	Lys	Val	Leu	Arg	Val	Gly	Pro	Trp	Ile	Asn	Thr
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His	Leu	Lys	Thr	Phe	Phe	Asn	Leu	Asp	Asn	Ile	Asp	Thr	Ala	Leu	Thr
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Gly	Leu	Arg	Val	Val	Tyr	Glu	Ser	Leu	Pro	Phe	Tyr	Lys	Ala	Glu	Lys
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Trp	Val	Tyr	Ala	Ser	Ile	Asp	Asn	Lys	Asp	Glu	Phe	Met	Glu	Glu	Leu





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Leu Lys Ile Lys Asp Pro Asn Cys Ile Ala Phe Ile Gly Glu Gly Ala		1840
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Glu Phe Leu Arg Leu Tyr Asn Gly His Ile Asn Ile Asp Tyr Gly Glu		
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Asn Leu Thr Ile Pro Ala Thr Asp Ala Thr Asn Asn Ile His Trp Ser		
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Ile Ser Arg Gln Asn Pro Leu Ile Glu His Met Asn Leu Lys Lys Leu	45
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	60

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His	Ser	Thr	Lys	Gln	Lys	Asp	Thr	Ile	Lys	Thr	Thr	Leu	Leu	Lys	Lys
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Leu	Met	Cys	Ser	Met	Gln	His	Pro	Pro	Ser	Trp	Leu	Ile	His	Trp	Phe
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Gly	Phe	Gln	Phe	Ile	Leu	Asn	Gln	Tyr	Gly	Cys	Ile	Val	Tyr	His	Lys
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Glu	Leu	Lys	Arg	Ile	Thr	Val	Thr	Thr	Tyr	Asn	Gln	Phe	Leu	Thr	Trp
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Lys	Asp	Ile	Ser	Leu	Ser	Arg	Leu	Asn	Val	Cys	Leu	Ile	Thr	Trp	Ile
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Ser	Asn	Cys	Leu	Asn	Thr	Leu	Asn	Lys	Ser	Leu	Gly	Leu	Arg	Cys	Gly
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Leu	Lys	Leu	Phe	His	Asn	Glu	Gly	Phe	Tyr	Ile	Ile	Lys	Glu	Val	Glu
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	370					375					380				
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Leu	Ser	Lys	Phe	Leu	Lys	Leu	Ile	Lys	Leu	Ala	Gly	Asp	Asn	Asn	Leu
				405					410					415	
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			420					425					430		
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Phe	Ile	Tyr	Arg	Ile	Ile	Lys	Gly	Phe	Val	Asn	Asn	Tyr	Asn	Arg	Trp
465					470					475					480
Pro	Thr	Leu	Arg	Asn	Ala	Ile	Val	Leu	Pro	Leu	Arg	Trp	Leu	Thr	Tyr
				485					490					495	
Tyr	Lys	Leu	Asn	Thr	Tyr	Pro	Ser	Leu	Leu	Glu	Leu	Thr	Glu	Arg	Asp
			500					505					510		
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		515					520					525			
Lys	Lys	Val	Asp	Leu	Glu	Met	Ile	Ile	Asn	Asp	Lys	Ala	Ile	Ser	Pro
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Pro	Lys	Asn	Leu	Ile	Trp	Thr	Ser	Phe	Pro	Arg	Asn	Tyr	Met	Pro	Ser
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Asn	Pro	Asn	His	Val	Val	Ser	Leu	Thr	Gly	Lys	Glu	Arg	Glu	Leu	Ser	610
Val	Gly	Arg	Met	Phe	Ala	Met	Gln	Pro	Gly	Met	Phe	Arg	Gln	Val	Gln	625
Ile	Leu	Ala	Glu	Lys	Met	Ile	Ala	Glu	Asn	Ile	Leu	Gln	Phe	Phe	Pro	645
Glu	Ser	Leu	Thr	Arg	Tyr	Gly	Asp	Leu	Glu	Leu	Gln	Lys	Ile	Leu	Glu	660
Leu	Lys	Ala	Gly	Ile	Ser	Asn	Lys	Ser	Asn	Arg	Tyr	Asn	Asp	Asn	Tyr	675
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Asp	Glu	Leu	His	Gly	Val	Gln	Ser	Leu	Phe	Ser	Trp	Leu	His	Leu	Thr	725
Ile	Pro	His	Val	Thr	Ile	Ile	Cys	Thr	Tyr	Arg	His	Ala	Pro	Pro	Tyr	740
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Trp	Thr	Ile	Glu	Ala	Ile	Ser	Leu	Leu	Asp	Leu	Ile	Ser	Leu	Lys	Gly	785
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Asp	Tyr	Leu	Leu	Ala	Leu	Asn	Ser	Leu	Lys	Leu	Leu	Tyr	Lys	Glu	Tyr	835
Ala	Gly	Ile	Gly	His	Lys	Leu	Lys	Gly	Thr	Glu	Thr	Tyr	Ile	Ser	Arg	850
Asp	Met	Gln	Phe	Met	Ser	Lys	Thr	Ile	Gln	His	Asn	Gly	Val	Tyr	Tyr	865
Pro	Ala	Ser	Ile	Lys	Lys	Val	Leu	Arg	Val	Gly	Pro	Trp	Ile	Asn	Thr	885
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Gln	Glu	Leu	Glu	Tyr	Arg	Gly	Glu	Ser	Leu	Leu	Cys	Ser	Leu	Ile	Phe	915
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Ala	Leu	Cys	Asn	Asn	Lys	Leu	Tyr	Leu	Asp	Ile	Leu	Lys	Val	Leu	Lys	945
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Leu	Tyr	Arg	Ser	Phe	Tyr	Arg	Arg	Thr	Pro	Asp	Phe	Leu	Thr	Glu	Ala	995
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Lys	Asp	Lys	Leu	Gln	Asp	Leu	Ser	Asp	Asp	Arg	Leu	Asn	Lys	Phe	Leu	1025
Thr	Cys	Ile	Ile	Thr	Phe	Asp	Lys	Asn	Pro	Asn	Ala	Glu	Phe	Val	Thr	1045

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 Tyr Ile Tyr Arg Ser Leu Lys Asp Cys Asn Asp His Ser Leu Pro Ile  
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 1890 1895 1900  
 Asn Leu Thr Ile Pro Ala Thr Asp Ala Thr Asn Asn Ile His Trp Ser  
 1905 1910 1915 1920  
 Tyr Leu His Ile Lys Phe Ala Glu Pro Ile Ser Leu Phe Val Cys Asp  
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